

AquaBlok® Installation Profiles



Site Location: US EPA Region 5
I-475 Jeep Pkwy. Interchange, Toledo, Ohio

Setting / Purpose: Construction of an interstate highway expansion resulted in a release of arsenic bearing water. The seep occurred on a slope that was to be reinforced and expanded to support lane widening. Objective is to provide both adsorptive treatment materials in combination with a low-permeability cap to limit the migration of residual contaminants within the slope.

Contaminant(s) of Concern: Arsenic from historic accumulation of fill material.

Project Status: Completed September 2012



AquaBlok Design / Site Area:

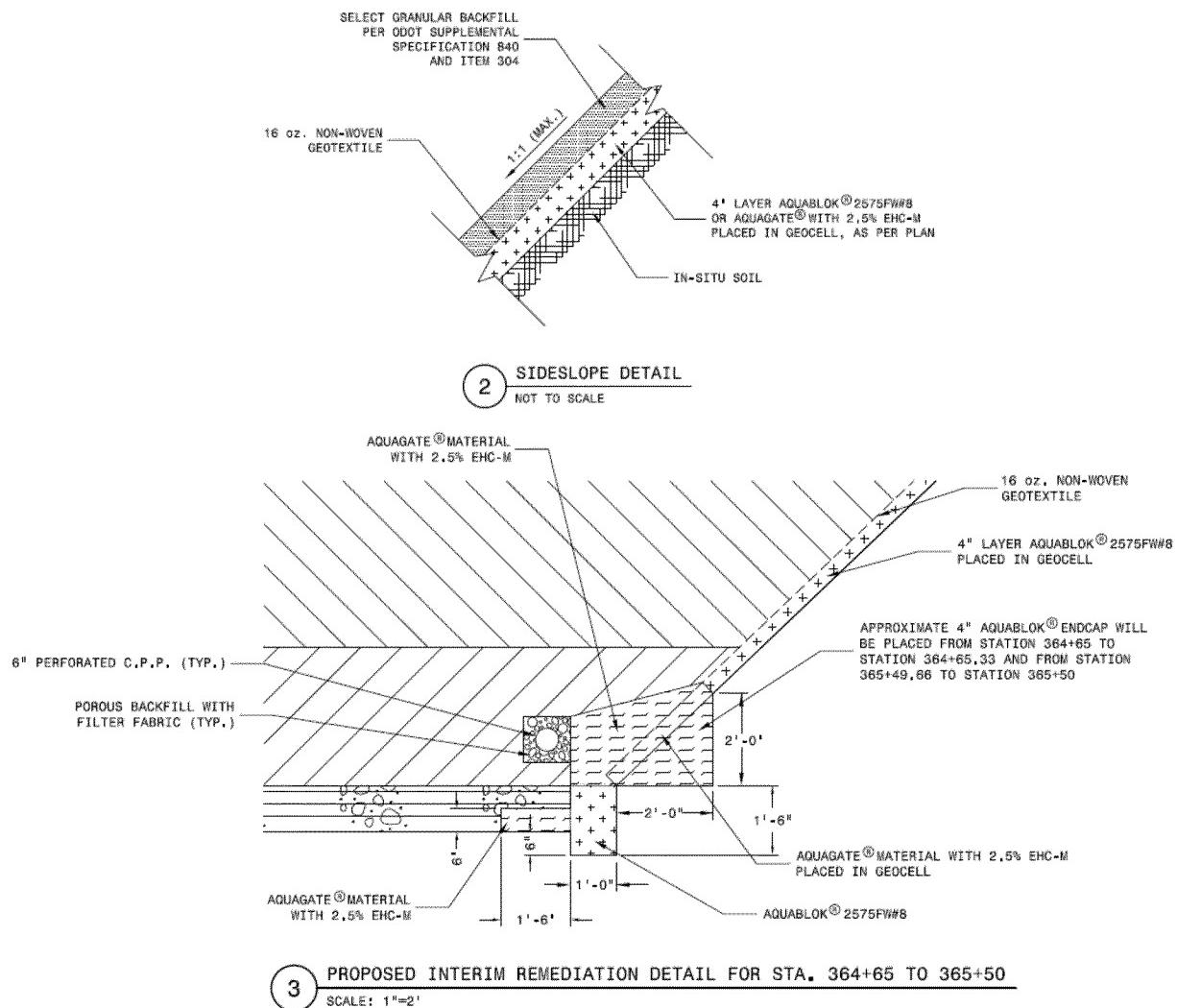
The design utilizes a “funnel & gate” treatment approach to direct and apply reactive, treatment materials to address the potential spread of the contaminant of concern from the seep zone. To accomplish this, a low -permeability layer of AquaBlok was placed on the slope to minimize migration and direct residual seep downward to the base of the slope. At the base of the slope, a permeable treatment zone was constructed using AquaGate+EHC -M materials. EHC®-M is a proprietary treatment material supplied by FMC Environmental. It has been tested and utilized in applications to remove metals and other contaminants from water. Due to the steep slope (approximately 1:1), a cellular slope stability material was used to maintain the AquaBlok prior to backfill.



Above: AquaGate Placement into Form at Base of Slope

Below: Installation of Cellular Slope Stability Material (Geocell)





Above: AquaBlok Placement into
Cellular Slope Stability Material



Below: Completed Installation with
Geotextile Cover – For Protection
Prior to Backfill of Slope